The Status of Organic Agriculture in North Dakota
December 2005

Prepared for
The North Dakota Department of Agriculture

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This project was funded by a grant from the
Federal-State Marketing Improvement Program.

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What is Organic?

"Organic" is a term used to describe how agricultural products are grown, processed and handled prior to their purchase by consumers. Organic food production is based on a holistic farming system, which reduces soil erosion, builds soil quality and enhances biodiversity without the use of chemical fertilizers and pesticides or in the case of livestock without the use of hormones or antibiotics. "Certified organic" is a term used for products grown and processed following a strict set of standards, which have been verified by a third-party or state certifier. The process for certification includes a written application, an inspection, and detailed record-keeping to ensure farmers and processors are meeting the set standards.

In 2002, the first United States federal organic standards became effective. These standards were developed over ten years in response to the Organic Foods Production Act of 1990. These final rules address production, processing, labeling, handling, certification, recordkeeping and allowable inputs.

To use the term "organic" on processed foods, both the ingredients and the facility processing the food must be certified organic. This includes buildings where the ingredients are stored, equipment, product packaging and storage areas for final products must all meet organic the USDA's National Organic Program (NOP) requirements. One component of the NOP's Final Rule critical to food processors is the "National List of Allowed and Prohibited Substances." This list details the synthetic products which can be used as food additives and for cleaning. Organic and non-organic products can be produced in the same facility, which is called a "split operation." However, split operations must take measures to prevent commingling and contamination of organic ingredients and final products.

Organic Agriculture & Markets in the United States

Organic farming has been one of the fastest growing segments in agriculture over the past decade. Organic farmers in 48 states farmed 2.2 million acres of land organically in 2003, a 63 percent increase from 1997 (USDA/ERS, 2005). Still, this is a small portion of the total U.S. cropland and pasture, with only .3 percent and .2 percent certified organic in 2001 (Greene, 2002). Between 1997 and 2001, the largest organic cropland gains were seen in corn, flax, spelt and rice and the largest gains in livestock were in dairy and layer hen production (USDA/ERS, 2002).

Organic producers grow a diversity of crops in rotation to manage weeds, diseases and pests and to maintain and improve soil health. Highlighted below is national information about the significant crops grown in North Dakota.

Grains. In 2003, the organic grain acreage increased 20 percent from 2001. While North Dakota had the highest total organic grain acreage in 2001, Montana overtook North Dakota in organic grain acreage in 2003. Organic millet and other specialty grains showed substantial growth between 1997 and 2003 (USDA/ERS, 2005). The category of other specialty grains, which includes unclassified grains, milo, triticale, kamut, amaranth, and quinoa, increased 163 percent between 2001 and 2003. North Dakota continues to lead in the production of these specialty

grains. Since 1997, many independent companies and large corporations have opened certified organic mills, which produce specialty flours from these specialty grains.

Beans & Lentils. The acreage for organic soybeans increased 28 percent in 2001. However, between 2001 and 2003, this acreage decreased 30 percent. A much higher share of organic soybeans are used for human consumption than conventional soybeans. While international markets, such as Japan, were relatively plentiful in 2001, these markets will face increasing competition in the next decade (Greene and Kremen, 2003). Dry beans, lentils and peas increased in acreage in 2001 and 2003. Colorado leads the country in the production of dry beans. Montana took the lead from North Dakota in the production of dry peas and lentils in 2003 (USDA/ERS, 2005).

Oilseeds. North Dakota has by far the largest acreage of organic oilseeds in the U.S. In 2001 the total acreage for oilseeds dropped, but this was due in part to poor weather conditions in North Dakota. This may also reflect volatility in the oilseed market (Greene and Kremen, 2003). In 2003, North Dakota led the nation in flax production with 81 percent of the acres (USDA/ERS, 2005) Flax acreage is now more than double the acreage of sunflowers nationally. The consumer demand for flax has been increasing due to its Omega-3 fatty acids and fiber. Flax is used to make oil for food and in breads and cereals. Whole flax is also becoming a dietary supplement sold in grocery stores and health food stores.

Livestock. The USDA prohibited the labeling of organic meat and poultry until 1999 when a provisional label was approved by the USDA. Permanent standards were enacted in 2002. Since 1999, organic meats and poultry have exhibited strong growth. Markets for dairy products and eggs did not face the previous USDA labeling restrictions and continued to increase in production as well. Industry experts expect the increased production of beef cattle and other livestock to continue. Many producer cooperatives are encouraging producers to increase their production of organic livestock (Greene and Kremen, 2003). One major challenge to the organic meat markets is the strong niche market for "natural" meat.

These growth patterns were also reflected in the organic industry's consumer sales. According to the Organic Trade Association (OTA), consumer sales of organic foods grew 20.4 percent in 2003 and accounted for $10.4 billion (2004). Organic foods have shown fairly consistent annual growth rates of 17 to 21 percent since 1997. It is anticipated the average annual growth rate of 18 percent will continue through 2008 (OTA, 2004). Fresh produce remains the highest selling category of organic foods and organic dairy products were the fastest growing category in the 1990s (Greene and Kremen, 2003). Sales of all organic food segments show strong growth in 2003. Sales of meat and dairy products are forecast to grow very rapidly because of some consumers' concerns about animal welfare and food safety (Tringe, 2005). The Midwest Organic and Sustainable Education Service (MOSES), based in Spring Valley, Wisconsin, believes these market trends indicate opportunities for Midwest organic producers in dairy, poultry and beef, produce and soymilk and organic grains, particularly for feeding the growing organic meat market (Nopar, 2005).

Consumer Trends. According to industry research, 66 percent of U.S. consumers report using organic products, with 27 percent of the total population reporting using organic products weekly

(Tringe, 2005). There are typically three venues for consumers to purchase organic foods – natural food stores, conventional grocery stores and direct-to-consumers sales. As organic foods become increasingly mainstream, they are becoming more commonplace in mainstream retail establishments. Independent natural grocery and health food stores combined with the largest natural food retail chains still represent the largest portion of the U.S. organic sales at 47 percent in 2003. However, the mainstream retail market, which includes grocery stores, supermarkets, mass merchandisers and club stores, made up 44 percent of sales in 2003. The remaining nine percent of sales is attributed to direct sales through farmer's markets and co-ops, food service and exports (OTA, 2004). Organic farmers market their products directly to consumers much more frequently than conventional producers. However this frequency is also impacted by the size of the organic farm, with 60 percent of organic farms less than 10 acres and 12 percent of farms larger than 10 acres selling directly to consumers (Dimitri and Green, 2002).

Organic Premiums. It is also important to note that organic commodities usually command premiums. Organic fruits, vegetables and milk have been reported as having the highest premiums. Organic grains and soybeans, which demanded high premiums in the 1990s, have fallen in price, but they still command substantial premiums above conventional prices (Greene and Kremen, 2003).

Organic Agriculture in North Dakota

North Dakota Organic Commodity Production. According to the USDA ERS in 2003, North Dakota had total of 145 certified organic farms, which is down from a high of 176 farms in 2001. North Dakota ranked fourth in certified organic acreage with 147,780 certified acres. This was a 62.8 percent increase in organic acreage from 1997, which is just slightly less than the total U.S. percentage of change of 63.1 percent during the same time period. (Table 1)
Table 1. Changes in Certified Acreage (USDA/ERS, 2005)

	1997	2001	2003	% Change 1997-2003
Certified Organic Acres (ND)	90,790	159,300	147,780	+62.8%
Certified Organic Acres (US)	1,346,558	2,094,272	2,196,874	+63.1%
ND % of Total Organic Acres	6.74%	7.60%	6.73%	
ND Rank	5th	4th	4th	

As of 2001, North Dakota led the U.S. in the production of organic grains and oilseeds. However, in 2003 Montana overtook North Dakota in the production of organic grains. Specific crops that North Dakota ranks first in production include: oats, buckwheat, other specialty grains (unclassified grains and milo, triticale, kamut, amaranth, quinoa), and both flax and sunflowers. (Appendix A) North Dakota is by far the leader in production of oilseeds, producing 51 percent of the U.S. total production. North Dakota ranks second in the production of dry beans, dry peas and lentils. (USDA/ERS, 2005)

Though North Dakota ranks only eighth in organic beef production, the growing markets for organic livestock may provide a real opportunity for North Dakota producers. Regional producer cooperatives, Organic Valley Family of Farms based in Wisconsin and the Organic Grassfed

Beef Coalition (OGBC) based in South Dakota, are both actively seeking livestock producers in North Dakota. In a phone interview, Angela Pridie, Executive Director of OGBC, stated their cooperative cannot meet the demand for organic grass-fed beef right now. She anticipates this market to continue to grow as "consumers continue to become more particular about the type of meat they are eating." However, in addition to the livestock production opportunities, North Dakota producers will also have an increased demand for grains and products to feed livestock as the organic meat and dairy markets grow.

With the growth of organic agricultural production, the number of organic certifiers working in the state has also increased. In 1997, there were only two organic certifiers in the state – Organic Crop Improvement Association (OCIA) based in Lincoln, Nebraska and International Certification Services (ICS) based in Medina, North Dakota. As of 2001, there were five certification companies in the state: OCIA, ICS, Stellar Certification Services based in Junction City, Oregon, Global Organic Alliance based in Bellefontaine, Ohio, and Quality Assurance International (QAI) based in San Diego, California.

North Dakota Organic Processing. As of August 2005, 29 companies in North Dakota are organically certified to handle and/or process organic products (Appendix B). These companies are diverse in size, ranging from commercial scale food processors to value-added on-farm processing plants. However, almost all of the state's certified organic companies handle or process organic grains, beans or oilseeds. A majority of the organic product being sold by North Dakota processors is not a finished product for consumers and is being sold to brokers, other processors, and exporters.

Many companies provide cleaning, bagging and storage services for organic commodities, with four such companies in the state specializing in organic flax for human consumption. Because the identity preserved (IP) market is very similar to the tracking required for organic products, many of the larger companies deal with IP conventional products as well.

As mentioned earlier, there is considerable market growth for specialty flours. This is also true in North Dakota. Mick Johnson oversees the organic flour production at the North Dakota Mill in Grand Forks, North Dakota. Johnson reported growth of their organic lines by more than 50 percent in each of the past seven years since the mill was certified organic. He anticipates this growth will continue, which will have a significant impact on North Dakota producers who supply 90 percent of the organic hard red spring wheat and durum for this company. This growth is also taking place at Earth Harvest Mills located in Harvey, North Dakota. Earth Harvest Mills produces the Dakota Prairie Organic line of products. The company is in its first year of production and their spelt and amaranth specialty flours are in high demand because they are gluten free. However, it is difficult for the company to source these rare raw products. Zach Tillinghast, the company's Miller, anticipates Earth Harvest Mills will continue to increase its production over the course of the next few years.

However, this is not the experience of all organic food processors. According to Maria Harmon, Executive Administrator for Dakota Growers Pasta Company in Carrington, North Dakota, the demand for organic pasta has not been as strong as other healthy pasta options, like whole wheat or Dreamfields low-carb pastas produced by their company. However, as consumer demand

continues to increase for healthier food options, Dakota Growers has had interest in providing organic pastas as private store brands to supermarkets in the U.S.

The Central Dakota Beef plant in Harvey, North Dakota, is in the process of becoming the only certified organic meat processing plant in the state. Plant Manager Aaron Baustad anticipates they will be certified by September 2005. The plant will continue to slaughter cattle, bison and farm-raised elk. Baustad is optimistic that the organic certification will provide a specialty processing service, which is needed within the state. He has already had some interest and the plant is not certified yet. Baustad also noted the organic certification process has not been difficult because it is very similar to the federal meat inspection guidelines.

Barriers to Growth of Organics in North Dakota

There are a variety of challenges for organic producers and processors. To access theses barriers, the Northern Plains Sustainable Agriculture Society (NPSAS), with technical assistance provided by the North Dakota State University Extension Service, conducted surveys of both groups. The complete survey results and more extensive analysis are included in Appendix C. Interestingly, both groups' technical assistance and information needs were related. In addition to the survey findings, many interviews were conducted with agricultural professionals, producers and processors throughout the state and the region. NPSAS also hosted a conference call for stakeholders to review the findings and make recommendations based on those findings and their own experiences.

Producer Needs. Sixty producers, 91 percent of respondents indicated their farms were either certified organic or farmed organically, without certification. As expected, respondents raised a variety of crops and livestock, which were marketed through a variety of channels. Seventy-seven percent of respondents reported they do not belong to a marketing or processing cooperative. However, marketing seems to be the most pressing challenge for producers. When comparing the response averages to questions identifying processing barriers and marketing barriers, the marketing barriers had a slightly higher average.

By comparing the processing problems identified and the usefulness of various processing information and services, four responses were rated highly on both lists: identification of regional specialty food processors; lack of organic food processors; identification of regional organic processors; and access to federally inspected meat processors. By comparing the marketing problems identified with the usefulness of specific marketing information and services, two responses were ranked highly on both lists: organic product pricing information and the development of marketing cooperatives and associations.

These findings are supported by the open-ended responses to the question, "What information or services would have the greatest positive impact on their economic sustainability?" Respondents' replies fell into some general categories, which correspond to the needs and useful services and information.

1. **Pricing Information:** Five respondents indicated services providing pricing information for marketing crops would be most helpful to them.

2. **Development of Local Markets:** Five respondents indicated the development of more local markets for locally grown or processed products would be most helpful to them.
3. **Cooperative Marketing Effort:** Four respondents indicated the most helpful service to them would be the creation of a cooperative to market organic products to coordinate marketing products, advertising, branding, and a certified organic label.
4. **Bulletin Board:** Three responses incorporated the idea of an on-line marketing bulletin board or other type of clearinghouse for information about producers looking to sell and processors and consumers looking to buy.
5. **Education:** A variety of education needs were expressed by individuals, including consumer education about topics such as CSAs, benefits of local products and nutrition information. Farmer education was another suggestion.
6. **Networks:** Some respondents indicated they would like to form a network of other local producers to share resources, equipment and/or work for grass-finished livestock producers, CSA systems, converting to organic, and/or sustainable production.

While survey respondents indicated an interest in cooperative marketing efforts, a recent focus group of organic producers had different results. In February 2005, NPSAS conducted a focus group of 50-60 producers discussing marketing issues for various organic commodities. According to Theresa Podoll, the NPSAS Stewardship Fund Director, producers indicated they would rather work through an existing marketing group, such as OFARM, to gain market information than form an independent grower cooperative.

The Organic Farmers Agency for Relationship Marketing (OFARM) is an association of organic farmer cooperatives and associations. OFARM works to coordinate efforts of producer marketing groups to benefit and sustain organic producers. One of the main functions of this organization is to help members share market information and compile lists of brokers and other customers who are reputable. The Capper-Volstead Act of 1922 gives qualifying farmers the right to organize to price their products. To participate in this organization, farmers must belong to a member cooperative or association. North Dakota producers can participate by becoming members of National Farmers Organics (NF Organics) and working with their marketing agent as a consultant. NF Organics works with producers in North Dakota, South Dakota and Iowa; however, there is currently very little participation from producers in either of the Dakotas.

A variety of other producer needs have also been articulated by agricultural professionals as well as producers through interviews conducted for this project. One of the recurring themes was the need for organic research. Organic producers have often had to learn by trial and error when making production decisions. Unfortunately, this can lead to costly mistakes with long-term impacts.

Some research on organic production techniques and varieties has been conducted through on-farm and Extension Center research. Eight and a half acres of land at the Dickinson Research Extension Center are certified organic. Patrick Carr at the Dickinson Research Extension Center conducted a “Long term organic and tillage study (LOTS),” which compared the performance of no-till rotations with an organic rotation using tillage. Steve Zwinger, a Research Specialist and Agronomist at the Carrington Research Extension Center, has been an active researcher on organic production in the state. Zwinger and Carr managed on-farm organic small grain variety

trials. Zwinger is currently managing a .25-acre track of irrigated land organically and experimenting with organic potato production. While this is important research, it is very limited in scope and needs to be expanded to meet the diverse needs of organic producers.

There is a significant need for research on production techniques and variety trials. According to Jane Soobey, of the Organic Farming Research Foundation, organic research needs to include farmer participation, an understanding of organic principles and a systems approach to working with the entire agroecosystem (2003). This research should include biological controls, high-value specialty or minor use crops and additional variety trials. However, Podoll believes there also is a need to facilitate better communication between farmers and researchers. Podoll frequently hears farmers say more research needs to be done, but when pressed to identify specific research needs, they find it difficult to identify specific research projects that would be helpful.

In addition to the research, this information needs to be shared with organic and transitioning producers. It also should be readily available to County Extension Agents and they need to receive some basic education to understand the principles of organic production.

Processor Needs. Only 16 processors responded to the NPSAS processors survey and only 25 percent of those respondents were certified organic processors. Twenty-five percent of survey respondents indicated their companies had expanded into organic products in the past five years. Another 13 percent researched organic products, but did not expand and 19 percent considered expanding into organic products. A variety of reasons for not expanding were cited, including: lack of regional consumer interest, lack of funding for expansion, and research determined the market would not bear the additional costs involved with organic products. Twenty-five percent of respondents indicated their companies plan to expand into organic products or new organic products within one year and another six percent within three years.

When asked to identify processing conditions which have served as problems in the past three years, respondents indicated energy costs and transportation availability and costs were the largest barriers for them. However, the following three challenges—financing, access to raw specialty ingredients and access to raw organic ingredients—were also ranked as some of the most useful services that could be provided to processors.

Interviews with industry stakeholders also revealed a variety of processor needs. Many non-organic meat processors interviewed indicated they had no interest in organic certification because of the difficult certification process. However, processing consultants who help processors become certified indicated meat plants that are federally inspected will find the organic certification process very similar. Other conventional processors felt certification was too expensive or thought that it required building a separate facility. While cost of certification certainly can be a barrier, there is also a lack of knowledge and misinformation about organic certification. In fact, David Gould, an organic consultant and inspector based in Portland, Oregon, stated, “In virtually every case with processors in ND or elsewhere there is an organically acceptable solution to every challenge a processor faces…I have almost never seen a situation that couldn't find some way to do it if they wanted to. Sometimes it takes a little creativity and a desire to overcome corporate inertia.”

Financing can also be a barrier to producer cooperatives and new organic businesses. Ann Wilkinson, an agricultural economist and consultant from Kansas City, Missouri, has worked with a variety of organic and natural producer cooperatives throughout the Midwest. Wilkinson stated, “For any producer group or new processor, the biggest challenge is financing for working capital. There are funds available for the early stage research and organization. However, once these groups are set established, they are on their own and often find it very difficult to raise funds to really become an established, successful organization.” According to Wilkinson, funding is specifically needed for expansion, market positioning and market development.

Research conducted in 2000 for the Henry A. Wallace Center for Agricultural and Environmental Policy found organic and conventional manufacturers both deal with the problems of producing uniformly consistent products and securing shelf space in retail outlets. However researchers indicated organic processors also had to deal with searching for enough organic ingredients at a price they can afford, verification of organic ingredients and maintaining organic integrity during processing (Dimitri and Richman, 2000). Brent Schulz, Marketing and Business Development Specialist for ICS in Medina, North Dakota, agreed, “One of the biggest challenges for [organic] processors is supply and the infrastructure to create a consistent supply of raw products.”

Interestingly, the services identified as useful by food processors seem to closely correspond to those of producers. These areas include:

- Marketing, which includes local and regional market development as well as consumer education;
- Additional distribution services for organic/specialty foods; and
- Assistance identifying potential suppliers of raw products or ingredients.

Programs Supporting Organics

There are a variety of programs already in place to support the growth of the organic industry. The North Dakota Department of Agriculture has programs in place that support organic producers, including the administration of the Organic Certification Cost Share program and their participation in the National Association of State Organic Programs. The following programs were specifically cited by North Dakota producers and processors.

Sustainable Agriculture Research and Education (SARE) grants. This federally funded program supports a variety of organic and sustainable activities, including educational programming, on-farm demonstrations, marketing activities and research. This is a highly competitive grant program.

Frank Kutka was recently hired to be the SARE Coordinator for North Dakota and South Dakota and also serves as the Assistant Director at the Dickinson Research Extension Center. Kutka will be working to increase organic education opportunities for County Extension Agents as well as other agricultural professionals.

Organic Farming Research Foundation. This is a private foundation dedicated to supporting research and education for organic production. Grants are available for on-farm research and general education. This organization also conducts general organic agriculture research including a national organic producer survey and monitoring organic research taking place in each state.

Northern Plains Sustainable Agriculture Society. This non-profit organization provides a variety of resources to organic and sustainable farmers including their Winter Conference, Summer Symposium, member newsletter, website, resource library and membership directory. Members also have the opportunity to network with other producers, buyers and industry stakeholders.

Organic Certification Cost Share program. This federally funded program, which is administered by the North Dakota Department of Agriculture will cost-share 75 percent of a producer or handler's certification fees up to $500. Many processors and producers interviewed cited this as a significant benefit. In 2003, 84 producers and processors utilized this program in North Dakota.

The North Dakota Agricultural Products Utilization Commission (APUC). The purpose of this group is to create new wealth and jobs through the development and expanded uses of North Dakota agricultural products and resources. Since 1993, APUC has awarded a total of $11.5 million to producers and companies. Of that funding, $267,000 or 2 percent funded a total of ten projects focusing on organic production or processing.

Programs Supporting Organics in Other State Agriculture Departments

Many states have developed programming to support the growth of the organic food industry through State Agriculture Departments. Included here are some examples of activities taking place in other states.

Minnesota Department of Agriculture. Minnesota has a long list of on-going projects dedicated to the development of the organic food industry in the state (see Appendix D). Highlights include MN Organic Conference, MN Organic Network which connects multiple stakeholders via a listserv and monthly conference calls, a Directory of Organic Certifiers, the MDA Organic Advisory Task Force, and a biennial Status of Organic Agriculture report to the state Legislature. A variety of organic resources are available on their web site, including fact sheets on organic processing . The Ag Resource Management and Development Division and the Ag Marketing Division both work closely with organic producers and processors. Minnesota is not an organic certifying agency and does not intent to become a USDA State Organic Program.

Colorado Department of Agriculture. With much of the state's agriculture in a significant downturn, Colorado sought federal funding for a Specialty Crops Program at Colorado State University to offer growers high value, specialty crop alternatives. This program includes the Grower Research and Education Grants project, which makes grants to growers and grower groups to conduct on-farm research and education projects. The program has also established The Rocky Mountain Small Organic Farm Project, an eight-acre organic field research site focusing on the needs of organic market producers. Due to increasing interest in organic

production and a shortage of organic seed, the Specialty Crops Program hosted an intensive seed production short course focusing on producing organic vegetable seed. The Colorado Department of Agriculture is also a UDSA-accredited organic certifier.

California Department of Agriculture. California's Department of Agriculture is not an organic certifier, but it does provide organic industry regulation through the California Organic Program. The Organic Food Advisory Board was created in 1991 to make recommendations to the California Secretary of Agriculture on all matters pertaining to the California Organic Program. The CA Organic Program also provides training on organic certification for processors.

Iowa Department of Agriculture. The Iowa Department of Agriculture is also a USDA-accredited organic certifier. The department's Organic Advisory Council is comprised of eleven appointees. The department also hosts an online Iowa Organic Product Directory. It should also be noted that seven years ago Iowa was the first state to hire an organic agriculture extension specialist.

Montana Department of Agriculture. This state department of agriculture is also a USDA-accredited certifier. The state also established an eight-member Organic Commodity Advisory Committee, which advises the department on the operation of the state's Organic Certificaion program. There is also a series of organic fact sheets available on-line.

Recommendations

Upon the request of the North Dakota Department of Agriculture, the following recommendations have been compiled from a variety of organic industry stakeholders in an effort to grow the organic food industry within the state of North Dakota.

Leadership

1. **Development of an Organic Advisory Board.** In an effort to provide timely and pertinent information and input about the organic industry to the Commissioner of Agriculture, it is recommended that an Organic Advisory Board be created. This forum would give key stakeholders within the organic food industry a voice to identify their industry's on-going and specific needs. This model is used by several state agriculture departments including Minnesota, Iowa, California, Colorado, Montana, Texas and Wisconsin is currently developing an advisory council. Representation on this advisory board should include stakeholders from all aspects of the industry: organic producers, organic processors, organic distributor and/or retailer, organic trader, extension professionals, researchers conducting organic research, the state's Sustainable Agriculture Research and Education (SARE) Coordinator, non-profit organizations dealing with sustainable agriculture issues, and organic certification agencies. A task force of organic industry stakeholders should be formed to initiate the development of this advisory board in cooperation with the State Department of Agriculture.
2. **Regularly update the *Status of Organic Agriculture in North Dakota* report.** Using this report as a guide, the following reports will continue to document the successes and challenges of the growing organic food industry in North Dakota and should be updated

every two years. These reports will be an educational document for the State Legislature as well as other entities interested in the organic food industry within North Dakota.

3. **Participate in organic conferences and events within North Dakota.** A variety of organic conferences and events are held within North Dakota each year. The Department of Agriculture's participation in these events lends credibility to the organic industry. It is an important opportunity to learn about specific needs from the organic industry in North Dakota.
4. **Pursue strategic alliances with other states' departments of agriculture.** By working cooperatively with other states' departments of agriculture, the North Dakota Department of Agriculture will enhance efforts to support organic agriculture in the state by increasing opportunities to share programming, informational resources and research development. Specifically, an alliance should be sought with the Minnesota Department of Agriculture, a leader in the development of the organic industry on a state level.

Education & Information

1. **Promote education of agricultural professionals about organics.** As one of the major sources of production information to farmers, County Extension Agents need to be educated about the basic principles of organic production. The Department of Agriculture is encouraged to work with the ND SARE Coordinator to develop opportunities to educate County Extension Agents and County Weed Boards about organic production practices and educational resources.
2. **Create educational opportunities for processors regarding organic regulations.** There are many misconceptions about the regulations processors must meet to become organically certified. Many processors do not understand that they can use the same facilities to process both organic and conventional products. A workshop addressing these processing issues should be added to the Marketplace agenda.
3. **Help promote organic foods through consumer and retailer education.** The Department of Agriculture already has a number of educational and informational resources for consumers and retailers. Adding organic designations and information to these guides would be a first step in increasing consumer and retailer awareness of organics in North Dakota.

Business & Market Development

1. **Create a program to fund working capital for organic producer groups and/or processors.** While funding is available for initial market research and development through the APUC program, additional funding opportunities should be made available to help finance working capital for start-up companies and cooperatives, as well as for groups interested in expansion into the organic markets.
2. **Help create a program to connect organic processors and producers.** One of the major challenges for organic producers is marketing their organic products. At the same time, processors site sourcing raw organic products as an obstacle. This program would benefit both producers and processors and could be expanded to a regional system. This concept is being modeled by the Minnesota Department of Agriculture. It would not have to be restricted to organic producers, but including organic products would be important.

3. **Encourage farmers and producer groups to explore and pursue minor-use high-value crops and value-added business opportunities**. Raising minor-use high-value crops for specialty markets or processing specialty crops can be forms of diversification for organic and conventional farmers. These crops are usually raised on small acreages and have a high value. Though the markets are limited, the Department of Agriculture should highlight research being done on these specialty crops, their uses and the processors seeking these specialty products. This awareness raising could take place at Marketplace or other events targeting audiences specifically suited for the production of these specialty crops.
4. **Help farmers and processors interested in value-added and organic processing to learn about the financial and business planning resources available to them in North Dakota.** There are resources available to individuals or companies interested in developing or expanding value-added and processing businesses. However, these resources can be a challenge to seek out. Certainly, the Dakota Enterprise Center is a helpful source of information and guidance for groups. Additionally, the Marketplace for Entrepreneurs Resource Directory is an excellent resource and contains a variety of information for producers and processors. This resource should be more widely promoted to producers and processors and should be available as a searchable on-line directory. Finally, a basic step-by-step summary of forming valued-added and organic processing businesses should be available in print and on the Department's website.

Research

1. **Promote and encourage research addressing the needs of organic producers.** Just as different conventional farmers throughout the state have different research needs, organic producers also have different research needs than conventional farmers. To date, most organic producers have had to learn through a process of trial and error. It is critical to the success of the organic food industry that organic research on production techniques and variety trials be conducted. This may include facilitating the communication between producers who need the research and researchers willing to do the research.
2. **Encourage and support research into minor-use, high-value crops.** While production of small acreages of specialty high-value crops could translate to any interested producer, there are a growing number of opportunities for this type of production in organic agriculture.

Technical Support

1. **Form collaborative relationships with the Economic Research Service (ERS) and ND Ag Statistics to help track organic statistics and industry information in the state of North Dakota.** It is crucial for farmers and businesses to have access to accurate information about the organic food industry within the state for market research and development. Currently, very limited information is available about the organic food industry in North Dakota.
2. **Develop a "Thinking about Organic" bulletin for conventional producers and processors interested in transitioning to organic production.** This resource will include contact information for certification agencies, a summary of organic marketing,

organic production and research resources, sample cropping budgets and resources available to transitioning and organic farmers and processors. The Organic Advisory Board could help with the development of this tool.

3. **Provide assistance publicizing organic events and information through the media and the Department of Agriculture's web site.** This is another way to educate consumers, processors and producers about the organic industry in North Dakota.

References & Citations

Baustad, Aaron. 2005. Personal communication. Baustad is the Plant Manager of Central Dakota Beef.

Dimitri, Carolyn and Nessa J. Richman. 2000. Organic Food Markets in Transition. Policy Studies Report No. 14. Available at: http://www.hawiaa.org.

Dimitri, Carolyn and Catherine Greene. 2002. Recent Growth Patterns in the U.S. Organic Foods Market. USDA ERS. September 2002. AIB-777.

Gould, David. 2005. Personal communication. Gould is an organic inspector and consultant.

Greene, Catherine. 2002. United States Department of Agriculture. Economic Research Service (USDA/ERS). Organic Production: Overview. Available at: http://www.ers.usda.gov/Data/organic.

Greene, Catherine and Amy Kremen. 2003. United States Department of Agriculture. Economic Research Service (USDA/ERS). U.S. Organic Farming 2000-2001: adoption of certified systems. Available at: http://www.ers.usda.gov/publications/aib780.

Harmon, Maria. 2005. Personal communication. Harmon is the Executive Administrator at the Dakota Growers Pasta Company.

Johnson, Mick. 2005. Personal communication. Johnson oversees the organic program at the North Dakota Mill.

Nopar, Doug. 2005. Midwest Organic and Sustainable Education Service (MOSES). Growing Retail Sales of Organic Products Create Significant Opportunities for Midwest Farmers. Feb. 2005. Available at: http://www.mosesorganic.org/helpwanted/projections.doc.

Organic Trade Association. 2004. The OTA 2004 Manufacturer Survey Overview. Available at: http://www.ota.com/pics/documents/2004SurveyOverview.pdf.

Podoll. Theresa. 2005. Stakeholder Conference Call. Podoll is the Stewardship Fund Director for Northern Plains Sustainable Agriculture Society.

Pridie, Angela. 2005. Personal communication. Pridie is Executive Director of the Organic Grassfed Beef Coalition.

Schulz, Brent. 2005. Personal communication. Schulz is the Marketing and Business Development Specialist for International Certification Services.

Sooby, Jane. 2003. State of the States Second Edition: Organic Farming Systems Research at Land Grant Universities 2001-2003. Organic Farming Research Foundation. Santa Cruz, CA. Available at: http://www.ofrf.org.

Tillinghast, Zach. 2005. Personal communication. Tillinghast is the Miller for Earth Harvest Mills.

Tringe, James M. 2005. United States Department of Agriculture. Foreign Agricultural Service (USDA/FAS). U.S. Market Profile for Organic Food Products. Available at: http://www.fas.usda.gov/agx/organics/USMarketProfileOrganicFoodFeb2005.pdf.

United States Department of Agriculture. Economic Research Service (USDA/ERS). 2005 Organic Production: Data. Tables of 1997, 2000, 2001, 2002 and 2003 organic acreage estimates. Available at: http://www.ers.usda.gov/Data/organic.

The USDA defines “natural” as a term “applied only to products with no artificial ingredients, coloring ingredients, or chemical preservatives; and the product and its ingredients are not more than minimally processed.”

More information available at www.ofarm.org.

Qualifying farmers are defined as “individuals engaged in the production of agricultural products who make the marketing decisions for that production.”

Available at http://www.mda.state.mn.us/esap/organic.

Available at http://www.mda.state.mn.us/esap/organicprocessfoods.pdf.